



In each issue, *JUCM* will challenge your diagnostic acumen with a glimpse of x-rays, electrocardiograms, and photographs of dermatologic conditions that real urgent care patients have presented with.

If you would like to submit a case for consideration, please e-mail the relevant materials and presenting information to editor@jucm.com.

FIGURE 1



The patient is a 14-year-old who took a fall two hours prior to presenting to the urgent care clinic. The left ankle is swollen and unable to bear weight, but the patient is otherwise healthy.

View the x-ray taken (**Figure 1**) and consider what your diagnosis and next steps would be. Resolution of the case is described on the next page.

THE RESOLUTION

FIGURE 2



The x-ray shows a subtle line running down through the epiphysis of the tibia into the joint, making this an intra-articular fracture.

In addition, note the dramatic widening of the tibial growth plate laterally.

The correct diagnosis is a Salter 3 displaced fracture. The physician performed a reduction, casted, and advised absolutely no weight bearing until further orthopaedic reassessment.

This case illustrates that if a patient who still has growth plates cannot ambulate, application of a posterior slab cast is indicated until reassessment by ortho.

Acknowledgment: Case presented by Nahum Kovalski, BSc, MDCM.



CLINICAL CHALLENGE: CASE 2

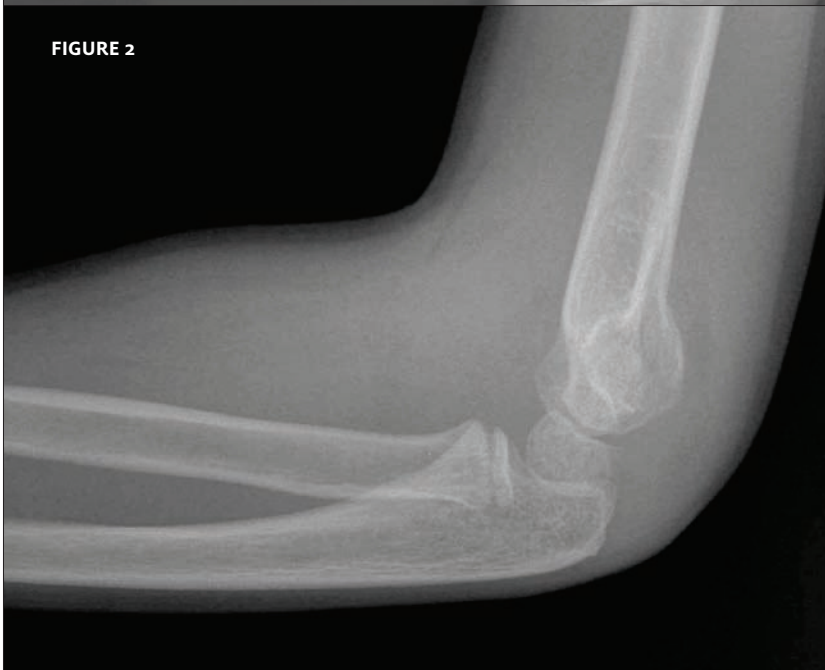
FIGURE 1



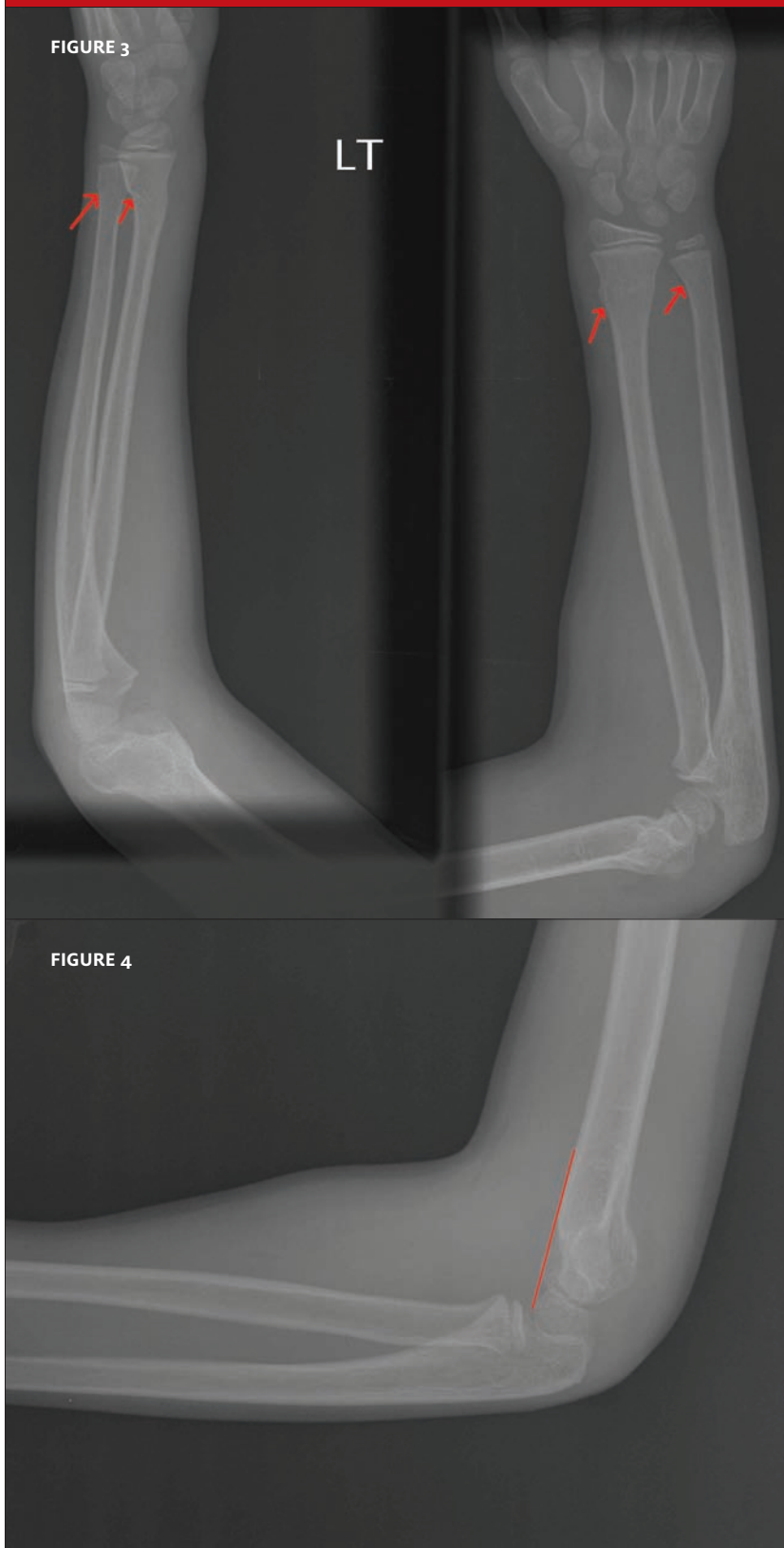
The patient is a 10-year-old boy who received a blow to the forearm when he fell at home. He presented with local swelling and tenderness on exam, complaining of severe pain in his wrist.

View the x-rays taken (**Figure 1** and **Figure 2**) and consider what your diagnosis and next steps would be. Resolution of the case is described on the next page.

FIGURE 2



THE RESOLUTION



This case offers valuable insight into the phenomenon of pain from one fracture distracting the patient from a second fracture. In this particular situation, the child's focus was on the wrist pain, yet there were fractures of both the wrist and the supracondylar region.

Drawing a line along the shaft of the humerus (**Figure 4**) shows that the distal humerus has been rotated backwards. The fact that the distal humerus is in line with the shaft is an indication of a supracondylar fracture. Under normal circumstances, 1/3 of the distal humerus should be in front of this imaginary line.

Also, note the increased anterior fat pad, as well as the posterior fat pad (which is not present under normal circumstances).

The supracondylar fracture is displaced, but if the distal pulses are normal and the swelling around the elbow is moderate, then it is legitimate to apply a posterior splint (from the top of the upper arm to the distal forearm) and refer for orthopaedic consultation the next day. In this case, the cast must extend to the palm of the patient, in order to immobilize the region of the fractures in the wrist.

Acknowledgment: Case presented by Nahum Kovalski, BSc, MDCM.